SECTION I – BACKGROUND INFORMATION

A. Purpose

A Temporary Erosion and Sediment Control Plan consists of temporary and permanent controls to be used during construction to prevent erosion or transport of sediment or other pollutants from the site. The most common methods are shown on this plan: other methods may be required if necessary.

B. Scope

All land-disturbing activities are required to control erosion. DPD reviews and approves erosion control for DPD permit applications with more than 750 square feet of land disturbance. This standardized Temporary Erosion and Sediment Control Plan was developed to assist the small project permit applicant design his or her erosion control plan.

C. Definitions

BEST MANAGEMENT PRACTICE (BMP) – Means a physical, structural, or managerial practice or device that prevents, reduces, or treats contamination of water or which prevents or reduces soil erosion. 1. NON-STRUCTURAL or OPERATIONAL BEST MANAGEMENT PRACTICES are those pollution control strategies that require modified or additional behavioral practices, such as sweeping a parking lot, or maintaining special equipment on site such as spill response equipment. 2. STRUCTURAL BEST MANAGEMENT PRACTICES are those pollution control strategies that require the construction of a structural or other physical modification on the site.

GRADING – Means excavation, fill, in-place ground modification, or any combination thereof, including the establishment of a grade following demolition of a structure.

LAND-DISTURBING ACTIVITY – Means any activity that results in a movement of earth, or a change in the existing soil cover (both vegetative and nonvegetative) or the existing topography. Land-disturbing activities include, but are not limited to, clearing, grading, filling, excavation, or addition or replacement of impervious surface.

SIDE SEWER – is defined in the Side Sewer Ordinance, Seattle Municipal Code Section 21.16.030.

SMALL PROJECT – Means project with less than 5,000 square feet of new or replaced impervious surface or less than one acre of land disturbing activity.

WATERCOURSE – Means the route, constructed or formed by humans or by natural processes, generally consisting of a channel with bed, banks or sides, in which surface water flows. Watercourse includes small lakes, bogs, streams, creeks, and intermittent artificial components (including ditches and culverts) but does not include receiving waters.

Responsible Party – Means all of the following persons:
1. Owners and occupants of property within the City of Seattle.
2. Any person causing or contributing to a violation of the provisions of this subtitle.

SECTION II – INSTRUCTIONS FOR USE OF THIS PLAN

A. General Plan Information

Section IIIB has been provided for the applicant to draw the project Temporary Erosion and Sediment Control Plan. The applicant may also draw stormwater control details on the permit application plan set site plan in lieu of completing Section IIIB.

1. Designate north arrow, pick the scale the plan will be drawn to, label the address and street name fronting structure and draw property lines.

2. Show and identify all existing and proposed structures on the site.

3. Locate and size all streams, swales, and drainage channels on or within 25-feet of the site that may involve or affect the drainage of the site to be developed. Indicate all existing stormwater and sanitary sewer pipes.

4. Indicate the direction and location of surface water runoff entering and exiting the site from all adjacent property. This may be done with topographic contour lines or directional arrows..

5. Indicate what types of systems will be used to convey runoff away from the proposed structures.

6. Show all minimum stormwater controls to be used during construction and to permanently stabilize the site. See Requirements, below.

B. Requirements

Some or all of the following erosion control methods will be required, depending upon the nature and scope of project. Identify items that may be a problem during construction, and choose BMPs that will mitigate construction impacts.

Complete construction stormwater control details and requirements may be found in the "***Construction Stormwater Control Technical Requirements Manual***", Volume 2 of the City of Seattle Stormwater, Grading, and Drainage Control Code (SMC 22.800).

1. From October 1 to April 30, no soil shall remain unstabilized for more than 2 days. From May 1 to September 30, no soils shall remain unstabilized for more than 7 days. Stabilize all soils, including stockpiles that are temporarily exposed. Use one of the following to temporarily stabilize soils, including stockpiles: E1.10 Temporary Seeding & Mulching, E1.15 Matting/Rolled Erosion Control Products, E1.20 Plastic Covering or E2.20 Dust Control.

2. After construction but before project is considered completed, permanently stabilize all exposed soils that have been disturbed during construction. Use one of the following to permanently stabilize soils: E1.35 Permanent Seeding or Planting, E1.40 Sodding.

3. Use one of the following to prevent the transport of sediment from the site: E3.10 Filter fence, E3.15 Straw bale barrier, E3.20 Brush barrier, E3.25 Gravel filter berm, E3.40 Sediment pond or E3.35 Sediment trap. Sandbags may also be utilized to prevent sediment from being discharged offsite. Retaining natural vegetation and buffer zones are encouraged, but may not be used as a substitute.

4. Prevent sediment from entering all storm drains, including ditches that receive runoff from the disturbed area, by installing storm drain inlet inserts, using sandbags and vacuuming sediment from impervious surfaces.

5. During construction, prevent the introduction of pollutants in addition to sediment into stormwater. Comply with the requirements for each of the following construction related activities: C1.10 Pesticide control, C1.20 Handling petroleum products, C1.30 Nutrient application, C1.40 Solid waste handling/disposal or C1.50 Use of chemicals during construction.

6. Limit construction vehicle access, whenever possible, to one location. Stabilize all access points. Provide periodic street cleaning by sweeping or shoveling any sediment that may have been tracked out. Place sediment in a suitable disposal area where it will not erode again. E2.10 Construction Access or E2.15 Construction Road Stabilization.

7. Inspect and maintain required erosion controls to ensure continued performance of their intended function.

8. Street use permit shall be obtained from SDOT for temporary drainage discharge, sidewalk closure and/or material storage in street and/or alley right-of-way.

SECTION III – MATERIALS AT JOB SITE

1. Construction erosion control measures must be in place and approved by DPD before any earth disturbance. Call (206) 684-8860 to schedule an inspection for this item.

2. No sediment shall be tracked onto paved streets or roadways. Sediment shall be removed from trucks and equipment before leaving the construction site. In the event of failure of the TESC system resulting in sediment tracking onto pavement, the contractor shall implement measures immediately to correct the situation.

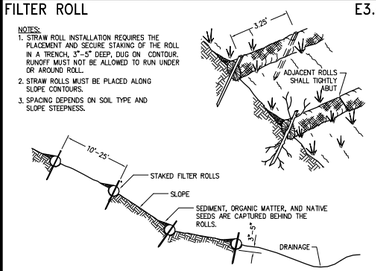
3. The contractor shall employ emergency measures to remove sediment from paved surfaces, as needed. Street sweeping shall be considered an emergency measure and not a basic component of the TESC system. Sediment tracked onto paved surfaces shall not be washed into storm drains or other utility inlets.

STANDARD DETAILS

SEDIMENT CONTROL

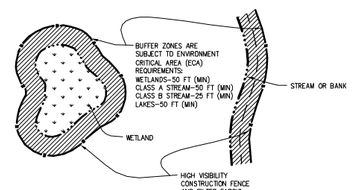
FILTER ROLL E3.45

NOTES:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
2. STRAW ROLLS MUST BE PLACED ALONG SLOPE CONTOURS.
3. SPACING DEPENDS ON SOIL TYPE AND SLOPE STEEPNESS.



REASON: TO INTERCEPT & RETAIN SMALL AMOUNTS OF SEDIMENT AND DECREASE THE VELOCITY OF SHEET FLOW
SYMBOL: SW

BUFFER ZONES (UNDISTURBED VEGETATED AREA) E1.30

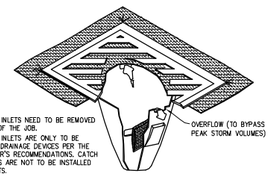


MINIMIZE CONSTRUCTION ZONE; PROTECT VEGETATION OUTSIDE CONSTRUCTION ZONE BY SEGREGATING IT WITH HIGH VISIBILITY CONSTRUCTION FENCING.

REASON: AN UNDISTURBED AREA OR STRIP OF NATURAL VEGETATION OR AN ESTABLISHED SUITABLE PLANTING THAT WILL PROVIDE A LIVING FILTER TO REDUCE SOIL EROSION AND RUNOFF VELOCITIES.
SYMBOL: BZ

STORM DRAIN INLET (INSERT) E3.30

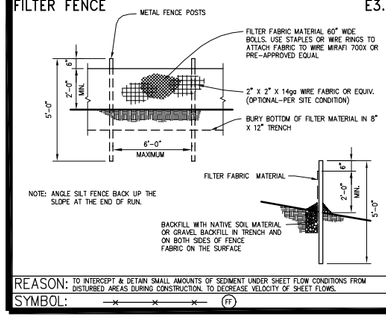
PRE-MANUFACTURED CATCH BASIN OR INLET INSERT



NOTES:
1. STORM DRAIN INLETS NEED TO BE REMOVED AT THE END OF THE JOB.
2. STORM DRAIN INLETS ARE ONLY TO BE INSTALLED IN DRAINAGE DEVICES PER THE MANUFACTURER'S RECOMMENDATIONS. CATCH BASIN INSERTS ARE NOT TO BE INSTALLED IN CURB INLETS.
3. INSERTS SHALL BE INSPECTED AND MAINTAINED WHEN A 1/2 INCH RAIN ACCUMULATES WITHIN A 24 HOUR PERIOD. CLEAN AND/OR REPLACE INSERT WHEN HALF OF THE TRAP IS FILLED WITH SEDIMENTS.

REASON: TO PREVENT SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA.
SYMBOL: SD

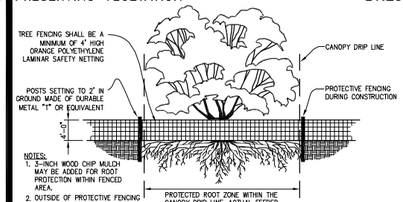
FILTER FENCE E3.10



REASON: TO INTERCEPT & DETAIN SMALL AMOUNTS OF SEDIMENT UNDER SHEET FLOW CONDITIONS FROM DISTURBED AREAS DURING CONSTRUCTION. TO DECREASE VELOCITY OF SHEET FLOWS.
SYMBOL: FF

STANDARD PRACTICES/GOOD HOUSEKEEPING

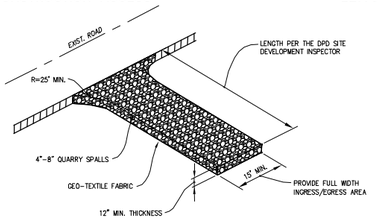
PRESERVING VEGETATION E1.25



NOTES:
1. 3-INCH WOOD CHIP MULCH MAY BE ADDED FOR ROOT PROTECTION WITHIN FENCED AREA.
2. OUTSIDE OF PROTECTIVE FENCING AREA, PROTECT ROOTS 2-INCHES OR LARGER IN DIAMETER BY USING HAND EXCAVATION TECHNIQUES.
3. MINIMIZE CONSTRUCTION ZONE; PROTECT VEGETATION OUTSIDE CONSTRUCTION ZONE BY SEGREGATING IT WITH HIGH VISIBILITY CONSTRUCTION FENCING.

REASON: TO REDUCE EROSION BY PRESERVING NATURAL VEGETATION WHEREVER PRACTICABLE.
SYMBOL: PG

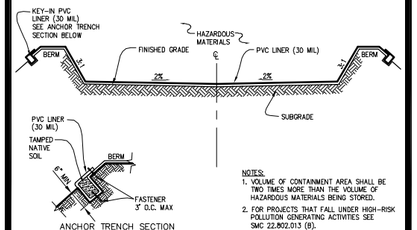
CONSTRUCTION ACCESS E2.10



STABILIZED ACCESS SHALL BE USED IN ALL AREAS OF THE SITE WITH VEHICLE TRAFFIC AND PARKING, INCLUDING PLANTING STRIPS. OTHER MEANS OF PROVIDING STABILIZED ACCESS WILL BE CONSIDERED.

REASON: TO REDUCE THE AMOUNT OF MUD, DIRT, ROCKS, ETC. TRANSPORTED ONTO PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.
SYMBOL: CE

CONTAINMENT AREA C1.80



NOTES:
1. VOLUME OF CONTAINMENT AREA SHALL BE TWO TIMES MORE THAN THE VOLUME OF HAZARDOUS MATERIALS BEING STORED.
2. FOR PROJECTS THAT FALL UNDER HIGH-RISK POLLUTION GENERATING ACTIVITIES SEE SMC 22.802.013 (B).

REASON: TO CONTAIN HAZARDOUS MATERIALS AND PREVENT CONTAMINATING THE SOIL.
SYMBOL:

COVER

TEMPORARY SEEDING AND MULCHING E1.10

SEEDING MAY BE USED ONLY BETWEEN APRIL 1 AND JUNE 30, AND SEPTEMBER 1 AND OCTOBER 30.

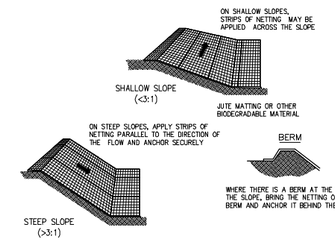
STRAW MULCHING:
1. FOR AREAS OF SITE WITH LESS THAN 30% SLOPE: 2-3 BALES OF STRAW EQUALS 2-INCHES OF STRAW MULCH OVER 1000 SQARE FEET.
2. MULCH SHALL BE WEED FREE STRAW.

TABLE 2: SEEDING MIXTURES*

NAME	PROPORTIONS BY WEIGHT	% PURITY	% GERMINATION
REDTOP (AGROSTIS ALBA)	10%	92	90
ANNUAL RYE (LOLIUM MULTIFLORUM)	40%	98	90
CHEWINGS FESCUE (FETUCA RUBRA COMMUTATA)	40%	97	80
WHITE DUTCH CLOVER (TRIFOLIUM REPENS)	40%	96	90

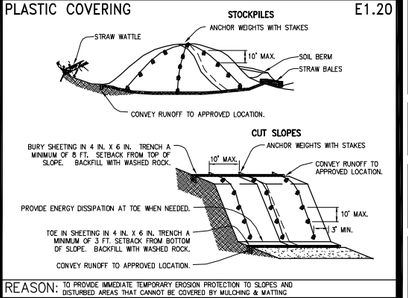
REASON: TO PROVIDE TEMPORARY SOIL STABILIZATION BY PLANTING GRASSES AND LEGUMES TO AREAS THAT WOULD REMAIN BARE FOR MORE THAN 7 DAYS WHERE PERMANENT COVER IS NOT NECESSARY OR APPROPRIATE.
SYMBOL: TS SO

MATTING/ROLLED EROSION CONTROL PRODUCTS E1.15



REASON: TO PROVIDE IMMEDIATE PROTECTION TO EXPOSED SOILS DURING THE PERIOD OF SHORT CONSTRUCTION DELAYS
SYMBOL: MU

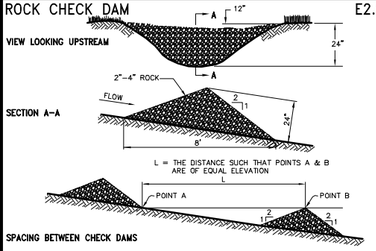
PLASTIC COVERING E1.20



REASON: TO PROVIDE IMMEDIATE TEMPORARY EROSION PROTECTION TO SLOPES AND DISTURBED AREAS THAT CANNOT BE COVERED BY MULCHING & MATTING
SYMBOL: CP

RUNOFF CONTROL

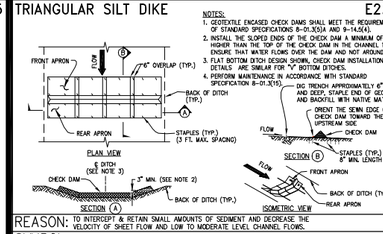
ROCK CHECK DAM E2.60



REASON: TO INTERCEPT & RETAIN SMALL AMOUNTS OF SEDIMENT AND DECREASE THE VELOCITY OF SHEET FLOW AND LOW TO MODERATE LEVEL CHANNEL FLOWS.
SYMBOL:

TRIANGULAR SILT DIKE E2.60

NOTES:
1. GEOTEXTILE ENCASED CHECK DAMS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATIONS 8-01.3(5)A AND 9-14.5(4).
2. INSTALL THE SLOPED ENDS OF THE CHECK DAM A MINIMUM OF 3" HIGHER THAN THE TOP OF THE CHECK DAM IN THE CHANNEL TO ENSURE THAT WATER FLOWS OVER THE DAM AND NOT AROUND IT.
3. FLAT BOTTOM DITCH DESIGN SHOWN. CHECK DAM INSTALLATION DETAILS ARE SIMILAR FOR "V" BOTTOM DITCHES.
4. PERFORM MAINTENANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(10).



REASON: TO INTERCEPT & RETAIN SMALL AMOUNTS OF SEDIMENT AND DECREASE THE VELOCITY OF SHEET FLOW AND LOW TO MODERATE LEVEL CHANNEL FLOWS.
SYMBOL:

Construction Stormwater Control Inspection Fees

Each project is charged a fee at the time of permit issuance to cover one or more construction erosion control inspections, depending on the size of the project. Each construction erosion control inspection thereafter is charged at $150 per hour: the number of inspections is determined by Department of Planning and Development site inspector according to the effectiveness of the project's construction erosion control measures.

Temporary Dewatering

If a project requires temporary dewatering, please see Client Assistance Memo (CAM) #506 and Director's Rule 3-2004 for more information.

The Project's TESC Plan Sheet must be located onsite during the duration of project's construction. The project's TESC Plan sheet must reflect all TESC changes made onsite during construction and those plan revisions must be initialed and dated by the project's certified TESC representative.

Rev. #	Date	By	Appr.	Revisions
1	06/10/04	RLJ	KKW	UPDATE TESC STANDARD PLAN

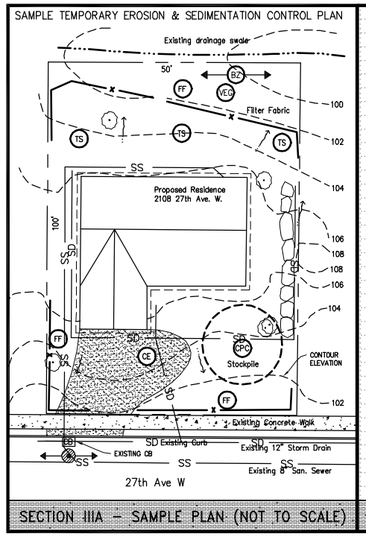
Site Plan

The Architectural Site Plan may be used for the TESC Site Plan. However, reference the TESC Standard Plan and the Architectural Plan to each other with notes, details, symbols and the plan's intent.

I agree to meet each requirement noted above and to use each stormwater control shown in the Site Plan (Section IIIB on this sheet) to prevent erosion and sediment from leaving the site of project number _____. I understand that I may be required to use additional controls if the controls on the site plan are not sufficient to prevent erosion or the transport of sediment or other pollutants from the site.

Signature of owner or agent _____ Date _____

SECTION IIIA – SAMPLE PLAN (NOT TO SCALE)



SECTION IIIB – SITE PLAN

ADDRESS:

PROPERY OWNER:

APPLICANT:

NOTE: THIS PLAN IS CONCEPTUAL; MODIFICATIONS MAY BE REQUESTED BY DEPARTMENT OF PLANNING AND DEVELOPMENT SITE INSPECTOR DURING CONSTRUCTION.

SITE PLAN CHECK LIST:

- ☐ **SCALE** 1"=5', 1"=10' or 1"=20'
- ☐ **NORTH ARROW**
- ☐ **LOT DIMENSIONS** Including street names and driveways.
- ☐ **NEW AND/OR EXISTING BUILDING FOOTPRINT** Include porches, walks, decks, roof lines, overhangs and floor cantilevers.
- ☐ **BUFFERS** Including required buffer areas, open spaces and green belts.
- ☐ **SURFACE WATER DRAINAGE** Including shorelines, wetlands, ponds, ditches, and streams.
- ☐ **SITE CONTOURS** Contour intervals showing elevation of the land may be expressed relative to any fixed point on the site. (GIS data available from DPD).
- ☐ **RETAINING WALLS** Including rockeries and retaining walls

NORTH ARROW

CHECK SCALE USED: ☐ ONE SQUARE = ONE FOOT (1"=5') ☐ ONE SQUARE = TWO FEET (1"=10') ☐ ONE SQUARE = THREE FEET (1"=20')

June 2004

TEMPORARY EROSION AND SEDIMENTATION CONTROL (TESC) STANDARD PLAN
(AKA Small Project Construction Stormwater Control Prescriptive Plansheet)
For Small Projects, see Seattle Municipal Code 22.802.020
Applicant Plan Sheet

CITY OF SEATTLE — DPD — DEPARTMENT OF PLANNING AND DEVELOPMENT

SHEET
TESC STANDARD PLAN

DESIGNED BY K. AMINIAN, P.E./ RICK JOHNSON